FLUIDIC DIVERTER VALVE WITH A VARIABLE VALVE-BORE CLEARANCE

ABSTRACT OF THE DISCLOSURE

A fluidic diverter valve includes valve element freely disposed within a valve bore. The valve bore has a cross sectional area that varies. As a result, the clearance between the valve element and an inner surface of the valve bore also varies. This variation in cross sectional area, and thus clearance, is such that a force of sufficient magnitude to move the valve element from a seated position is initially applied to the valve element, but the force on the valve element is reduced once it is moved from the seated position. Thus, the impact force upon attaining another seated position is reduced.